

KOROGODIN, V.I.; MALINOVSKIY, O.V.; PORYADKOVA, N.A.; IZMOZHNEROV, N.A.

Problem of the reversibility of various forms of radiation  
injury in diploid yeast cells. TSitologiya 1 no.3:306-315  
My-Je '59. (MIRA 12:10)

1. Kafedra biofiziki Moskovskogo universiteta, Laboratoriya  
radiobiologii Instituta fiziologii im. I.P.Pavlova AN SSSR,  
Leningrad, Laboratoriya biofiziki Instituta biologii Ural'skogo  
filiala AN SSSR, Sverdlovsk.

(RADIATION--PHYSIOLOGICAL EFFECT) (EAST)

KOROGODIN, V.I.; LYU AY-SHEN' [Lin Ai-shen]

Features of the effect of ionizing irradiation on the haploid  
yeasts *Zygosaccharomyces Bailii*. TSitologiya 1 no.4:379-386  
Jl-Ag '59. (MIRA 12:10)

1. Kafedra biofiziki Moskovskogo universiteta.  
(GAMMA RAYS--PHYSIOLOGICAL EFFECT)  
(YRAST)

KOROGODIN, V.I.; TARUSOV, B.M.; TAMBIYEV, A.Kh.

Relation of postirradiation restoration reactions to the density of cell suspension, temperature and oxygen pressure [with summary in English]. Biofizika 4 no.2:224-227 '59. (MIRA 12:4)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova.

(YEASTS, effect of radiations,

gamma rays, eff. of suspension density, temperature & oxygen on post-irradiation reactions (Rus))

(GAMMA RAYS, effects,

on yeasts, eff. of suspension density, temperature & oxygen on post-irradiation reactions (Rus))

AGRE, A.L.; KOROGODIN, V.I.

Distribution of radioactive pollutions in stagnant water. Med.  
rad. 5 no.1:67-73 Ja '60. (MIRA 15,3)

1. Iz kafedry biofiziki biologo-pochvennogo fakul'teta  
Moskovskogo gosudarstvennogo universiteta.  
(WATER POLLUTION) (RADIOACTIVE SUBSTANCES)

KOROGODIN, V.I.; LUCHNIK, N.V.

Problem of the nature of primary changes in radiation cell  
injury. Biofizika 5 no.1:88-90 '60. (MIRA 13:6)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo  
universiteta i laboratoriya biofiziki Ural'skogo filiala AN  
SSSR.

(RADIATION INJURY exper.)

KOROGODIN, V.I.; MAMEDOV, T.G.

Effect of irradiated plant seedlings on the growth of nonirradiated  
seedlings. Biofizika 5 no. 2:186-188 '60. (MIRA 14:4)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo  
universiteta im. M.V. Lomonosova.  
(PLANTS, EFFECT OF RADIATION ON)

27.1220

30367

S/205/61/001/005/002/005

D299/D304

AUTHORS: E.M. Karabayev, and V.I. Korogodin

TITLE: The effects of temperature and oxygen on the primary lesions which arise in cells due to irradiation (Experiments on diploid yeast organisms)

PERIODICAL: Radiobiologiya, v. 1, no. 5, 1961, 653 - 658

TEXT: The experiments were calculated to clarify certain aspects of the energetic metabolism in the postradiation restoration of cells. The aspects were: The fate of the primary radiobiological lesions which, through unfavorable conditions, did not succeed in being "restored"; whether these lesions become irreversible or whether they preserve their "restorability". Experiments were carried out with *Saccharomyces vini* var. Megri-139-B, irradiated with gamma-rays in a ГУТ-Co-400 (GUT-So-400) apparatus at an intensity of 1000-1450 r/min. The yeasts were incubated at 0° C in sterile water or on a nutrient medium, at 30° C in sterile water with free access of oxygen or in a state of anoxia. The results proved convincingly that

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D299/D304

The effects of temperature and ...

neither temporary storage of the irradiated yeasts at low temperature nor incubation in a starvation medium at 30° C in a state of anoxia led to an increase in the survival rate. Further tests revealed that keeping the irradiated yeasts at 0° C or in a state of anoxia had no effect on the subsequent reparatory changes when the yeasts were transferred into conditions conducive to restoration. A third series of tests studied the effects of prolonged (up to 6 hr) maintenance of the yeast cells, in conditions not conducive to restoration, on the reversibility of the primary biological lesions resulting from irradiation. The results showed that this treatment in no way impaired the yeast cells' restorability. Consequently, low temperatures or anoxia prevented the restoration of viability in irradiated diploid yeast cells incubated in a non-nutrient medium. The lesions due to radiation, however, retained their reversibility. The authors extend the hypothesis that reparation of irradiated cells is perhaps achieved by the final destruction and the removal from the cells of those structural elements which had been partially damaged by irradiation. There are 2 figures, 2 tables and 13 references: 8 Soviet-bloc and 5 non-Soviet-bloc. The references to the 4 most recent English-language publications read as

X

Card 2/3

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S/205/61/001/005/002/005

D299/D304

The effects of temperature and ...

follows: A.W. Pratt, W.S. Woos, M. Eden, J. Nat. Cancer Inst., 15, 1039, 1955; P.E. Kimbal, N. Gaither, S.M. Wilson, Radiation Res., 10, 490, 1959; N.E. Gillies, T. Alper, Nature, 183, 237, 1959; T. Alper, Radiation Res., 5, 537, 1956.

ASSOCIATION: MGU, Kafedra biofiziki (MGU, Department of Biophysics)

Card 3/3

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27.1220 also 2209

32750  
S/205/61/001/006/010/022  
D268/D305

AUTHORS: Alekseyeva, S.I., Grayevskiy, Ye.Ya., Korogodin, V.I.,  
Nekrasova, I.V., and Tambiyev, A.Kh.

TITLE: The effect of cell suspension density on radiosensi-  
tivity of yeasts

PERIODICAL: Radiobiologiya, v. 1, no. 6, 1961, 878 - 886

TEXT: The correlation between concentration of suspensions and  
radiosensitivity was studied in 5 yeast strains: the haploid Zygo-  
saccharomyces bailii, diploid Saccharomyces vini Megri 139-B, and  
3 strains of S. cerevisiae, haploid 127-12 d, diploid WY-110, and  
tetraploid 16 x 32. Strains were cultured on wort agar at 28 - 30°C  
and irradiated after 2 - 3 days development. Either aliquots obtai-  
ned by scraping hard medium or by centrifuging dense solutions, or  
suspensions with a concentration of  $10^9$  -  $10^4$  cells/ml. were irra-  
diated. A PY-200 apparatus (RUP-200 industrial X-ray unit 200)  
with a dose rate of 5,400 r/min. was the X-ray source, and a T-  
Co-400 apparatus (GUT-Co-400, therapeutic gamma unit Co 400) the  
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S/205/61/001/006/010/022  
D268/D305

The effect of cell suspension ...

gamma-ray source. Strains were also irradiated in 5 - 10 % egg protein solution. Cell viability was determined by counting macro- and micro-colonies, incubated on wort agar at 30°C, according to methods previously described by Korogodin (Ref. 8-9: Biofizika, 2, 178, 1957; 3, 206, 1958). Oxygen content in aqueous suspensions at different concentrations was determined polarographically by a method described by Konstantinova and Grayevskiy (Ref. 10: Dokl. AN SSSR, 132, 1427, 1960). Aqueous suspensions of the 3 *S. cerevisiae* strains exposed to X-rays showed a fall in dose effectiveness as the cell suspension concentration increased. The oxygen content was determined polarographically in suspensions at different concentrations. Results showed a clear fall in oxygen tension as the suspension concentration increased. Respiration intensity was determined in *Z. Bailii* and Megri 139-B and showed that the  $Q_{O_2}$  for the former was  $840 \pm 156$ , and for the latter  $3,100 \pm 320$   $\mu$ l./hour for  $10^{10}$  cells. It was much lower in haploid than in diploid cells. Accordingly the concentration effect would be weaker in *Z. bailii* than in Megri 139-B. If the effect were due to oxygen deficiency, suspension concentration would affect radiosensitivity rather less

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The effect of cell suspension ...

with irradiation in oxygen-free conditions than in aerated water, especially in a strain with low respiration intensity. This would be in line with the views of Gunter and Kohn (Ref. 3: J.Bacteriol., 72, 422, 1956).  $10^6$  cells/ml. suspensions and aliquots from both strains were exposed to gamma-irradiation in the atmosphere and in a vacuum, and viability determined according to micro-colonies. Results completely confirmed the proposition. The dose effectiveness reduction coefficient for the haploid strain irradiated in air was 0.81, and for the diploid 0.47. In conditions of anoxia, no concentration effect was observed for the former, while in the latter the dose effectiveness reduction coefficient was 0.81. Oxygen content in suspensions in a vacuum was 3 - 5 % compared with that in dilute suspensions in the air. Irradiation of  $10^6$  cells/ml. suspensions of haploids and diploids in 5 and 10 % egg protein solutions with gamma-rays showed no protective reactions by the proteins. According to Gunter and Kohn yeast cells are also only very mildly sensitive to  $H_2O_2$ . Tests were made with 4 strains. Results showed that though they differed in their sensitivity, haploids being most sensitive,  $H_2O_2$  only affected viability noticeably at concentrations

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D268/D305

The effect of cell suspension ...

of 13.4 and 28.8  $\mu\text{g./ml.}$  Experiments were also made to determine the effect of suspension concentration at the time of irradiation on post-radiation recovery with Megri 139-B, whose post-radiation recovery has been already described by Korogodin (Ref. 7: Biofizika, 3, 703, 1958). Exposure was to gamma-irradiation. Part of the suspension was sown on nutrient medium immediately after irradiation and part at 24 - 48 hours. Viability was determined by macrocolonies. In both cases change in dose effectiveness was largely dependent on suspension concentration at irradiation. The extent of post-radiation recovery of yeast cells was virtually independent of their concentration at irradiation, the dose effectiveness reduction coefficient fluctuating within  $0.41 \pm 0.03$ . It is concluded that at concentration effect was produced when yeast cells were irradiated with X- and gamma-rays in normal air and in one case with oxygen deficiency. Radiosensitivity was independent of suspension density up to a concentration of  $10^6$  cells/ml., but increased proportionally to the concentration logarithm with a further increase in density. The concentration effect was more pronounced in the strain with greater respiration intensity. The very poor sensitivity of yeast cells to  $\text{H}_2\text{O}_2$  was demonstrated, as well as the reduct-  
Card 4/5

BILUSHI, V.; KOROGODIN, V.I.

Comparative analysis of the restoration of diploid yeasts following  
alpha and gamma irradiation. Dokl. AN SSSR 138 no.5:1208-1211 Je  
'61. (MIRA 14:6)

1. Institut radiatsionnoy i fiziko-khimicheskoy biologii AN SSSR i  
Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova. Pred-  
stavleno akademikom V.A.Engel'gardtom.

(YEAST) (ALPHA RAYS—PHYSIOLOGICAL EFFECT)

(GAMMA RAYS—PHYSIOLOGICAL EFFECT)

KOROGODIN, V. I.

Dependence of Primary Radiobiological Lesions on the Functional State of Cells During the Post-Radiation Period

E. M. Krasnyy and V. I. Korogodin

2

It is known that the survival of many unicellular organisms irradiated with ionizing radiations depends on the conditions after irradiation. Experiments with yeast cells allow the following conclusions: (1) the primary radiobiological lesions caused in cells, directly or soon after irradiation, result in irreversible changes only when they involve certain processes of the life cycle of the cell, related probably to the duplication of biological macromolecules; (2) prior to the moment of expression, the primary lesions either remain unchanged (at least quantitatively) or else are "restored" provided suitable conditions exist; (3) one of the basic conditions of "post-radiation restoration" is the rate of energy turnover in irradiated cells, observable in their respiration or their fermentation. Finally, the significance is discussed of the phenomenon of post-radiation "restoration" for the study of the mechanism of the biological effect of ionizing radiations.

Lomonosov Moscow State University of the USSR

Report presented at the 2nd Intl. Congress of Radiation Research,  
Harrogate/Yorkshire, Gt. Brit. 5-11 Aug 1962

PETROV, R.V.; KOROGODIN, V.I.; LYASS, F.M.; NEYFAKH, A.A.; ROMANTSEV, Ye.F.; VEREVKINA, N.M., red.; MORGUNOVA, G.M., tekhn. red.

[Contribution of radiology to the development of the medical and biological disciplines] Vklad radiologii v razvitie mediko-biologicheskikh distsiplin. [By] R.V.Petrov i dr. Minsk, Izd-vo M-va vysshego, srednego spetsial'nogo i professional'nogo obrazovaniia BSSR, 1962. 145 p. (MIRA 15:9)  
(RADIOBIOLOGY) (RADIOLOGY, MEDICAL)

43478

S/205/62/002/006/004/021  
E027, E410

27.1220

AUTHORS: Korogodin, V.I., Karabayev, E.M.

TITLE: The relationship between the effectiveness of gamma irradiation of diploid and haploid yeast and the conditions of post-radiation maintenance

PERIODICAL: Radiobiologiya, v.2, no.6, 1962, 824-830

TEXT: The authors have investigated the effect of environmental conditions on the survival of a diploid strain of *Saccharomyces vini* and a haploid strain of *Zygosaccharomyces baili* after gamma irradiation. The organisms were suspended in sterile tap-water and exposed to a cobalt source of strength 1000 r per minute for various times, after which they were plated out at various temperatures on 2% agar media containing varying concentrations of must. The number of colonies growing up from irradiated and unirradiated cells of the diploid yeast was studied with various concentrations of must (0.2 to 17 Balling) and at temperatures of 20 to 37°C. The survival was clearly influenced by both factors, which had an additive effect. The maximum degree of survival (46%) was obtained at 30°C on a medium containing 0.2 Balling of must and the minimum (0.65%) at 37°C with 5 Balling. The  
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The relationship between ...

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E027/E410

percentage survival of the diploid yeast can thus be varied over 70-fold range by adjusting the post-radiation conditions. Similar results were found for the haploid strain. The survival of irradiated cells depends on the influence of the environmental conditions, on the intensity of the recovery processes and on the duration of time during which the initial potential injuries are reversible, i.e. the completion of the first cell division cycle. Hence, any combination of conditions which retard the completion of the first cell division and intensify the reparative processes should increase survival. There are 2 figures and 5 tables.

ASSOCIATIONS: Institut meditsinskoy radiologii ANN SSSR, Obninsk  
(Institute of Medical Radiobiology AMS USSR, Obninsk)  
Moskovskiy gosudarstvennyy universitet im.  
M.V.Lomonosova, biologo-pochvennyy fakul'tet  
(Moscow State University imeni M.V.Lomonosov,  
Biology and Soil Science Division)

SUBMITTED:  
Card 2/2

March 2, 1962

KARABAYEV, E.M.; KOROGODIN, V.I.

Role of oxygen in postirradiation cell restoration. Zhur. ob. biol.  
23 no.2:150-152 Mr-Apr '62. (MIRA 15:5)

1. Department of Biophysics, State University of Moscow.  
(YEASTS) (PLANT CELLS AND TISSUES)

KOROGODIN, V.I.; YEGOROV, A.Ya.; KABAKOV, Ye.N.; MARKOVA, L.I.

Comparative study of light and dark reactivation of yeast cells of different ploidy injured by ultraviolet radiation. Zhur.ob. biol. 23 no.4:302-307 J1-Ag '62. (MIRA 15:9)

1. Department of Biophysics, State University of Moscow and All-Union Research Institute of Phytopathology.  
(ULTRAVIOLET RAYS—PHYSIOLOGICAL EFFECT)(CHROMOSOME NUMBERS)

KOROGODIN, V.I., kand. biologicheskikh nauk

"Polymers, cell, and life" by N.V. Lysogorov, V.S. Tongur. Reviewed  
by V.I. Korogodin. Nauka i zhizn' 29 no.6:74 Je '62.

(MIRA 15:10)

(BIOCHEMISTRY) (LYSOGOROV, N.V.) (TONGUR, V.S.)

S/205/63/003/001/009/029  
E028/E185

AUTHORS: Korogodin V.I., Bilushi V., Markova L.I., and  
Shekhtman Ya.L.

TITLE: Restoration of the viability of yeast cells of varying  
ploidy after irradiation with  $\alpha$ -particles

PERIODICAL: Radiobiologiya, v.3, no.1, 1963, 39-44

TEXT: The cells of 12 strains of yeast of varying ploidy  
were irradiated in thin layers with  $\alpha$ -particles and were then  
tested for viability by plating out on wort-agar. The sources of  
radiation used were  $^{239}\text{Pu}$ , giving a dose of 50 rad/min at a  
distance of 13 mm from the surface, and  $^{210}\text{Po}$  giving at 8 mm a  
dose of 10 200 rad/min. Irradiation was continued for periods  
ranging from a few minutes to several hours, and was carried out  
at 1 - 2 °C and at room temperature. The results showed that the  
 $\text{LD}_{50}$  was dependent on ploidy, the haploid strain being the least  
and the diploid strain the most radioresistant. With the higher  
ploidy up to 6 radioresistance declined in one set of strains  
(Mortimer), but increased in a set obtained from another source  
Card 1/2

L 17049-63

EWT(m)/BDS/ES(j) AFTTC/

S/205/63/003/002/007/024

ASD/AFWL AR/K

AUTHORS: Buyevich, Yu. A., Karabayev, E. M., and Korogodin, V. I. 59

TITLE: The choice of a model which describes restoration of vitality of yeast cells damaged by gamma radiation 9

PERIODICAL: Radiobiologiya, v. 3, no. 2, 1963, 197-203

TEXT: The objects of the investigation were *Saccharomyces vini*, Megri-139-B strain and *Zygosaccharomyces Bailii*. Two possible models of postradiation restoration of damaged yeast cells were considered — the model of "cellular" or "spontaneous" restoration and "gradual" restoration model. It was shown that postradiation restoration of *Saccharomyces vini* occurs gradually by slow decrease in the degree of damage. There are 2 tables, 4 figures and a 10-item bibliography.

ASSOCIATION: Institut meditsinskoy radiologii AMN SSSR (Institute of Medical Radiology of the Academy of Medical Sciences of the USSR), Obninsk; Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova Biologopochvennyy fakul'tet (Moscow State University im. M. V. Lomonosov, Department of Biology and Soils)

SUBMITTED: March 2, 1962

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KOROGODIN, V.I.

Foreword. Trudy MOIP. Otd. biol. 7:5-6 . '63.

Role of the ploidy factor in radiation injury of cells and some  
genetic effects of radiation. 181-184

GRAYEVSKIY, E.Ya.; KOROGODIN, V.I.; KUZIN, A.M., ; MOSKALEV, Yu.I.; SMIRNOV, K.V.; STREL'TSOVA, V.N.; SHAPIRO, N.I., doktor biol. nauk; SHIKHODYROV, V.V.; EYDUS, L.Kh.; ALEKSAKHIN, R.M., red.

[Principles of radiobiology] Osnovy radiatsionnoi biologii. Moskva, Nauka, 1964. 402 p. (MIRA 18:1)

1. Akademiya nauk SSSR. Institut biologicheskoy fiziki.
2. Chlen-korrespondent AN SSSR (for Kuzin).

ACCESSION NR: AP4015090

S/0205/64/004/001/0083/0091

AUTHOR: Korogodin, V. I.

TITLE: Time periods in which potential radiation injuries are realized in diploid yeast cells

SOURCE: Radiobiologiya, v. 4, no. 1, 1964, 83-91

TOPIC TAGS: diploid yeast cell, Saccharomyces Vini, gamma-irradiation, potential radiation injury, cell chromosome abnormality, cell regeneration, gamma radiation dose, budding cell level, incubation duration, regenerable cell level, mathematical data analysis

ABSTRACT: This study was carried out to establish the period of the life cycle at which potential injuries responsible for the death of irradiated cells are realized, and the period at which potential injuries responsible for chromosome abnormalities are realized. Diploid yeast suspensions (Saccharomyces Vini, Megri-139-B strain) containing 0.1-0.03% budding zooids were gamma-irradiated (GUT-Co-400 unit, 1350 r/min) with single doses from 100 to 315 kr. The

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ACCESSION NR: AP4015090

suspensions were incubated at 30°C for 5 to 8 hrs following irradiation. To maintain a constant concentration, the incubation period was terminated in all cases before the buds could separate from the irradiated cells. The level of budding cells was determined by taking suspension samples every hour for 8 hrs. Survivability of cells was determined by comparing the number of colonies in experimental and control samples after a 4 day incubation period. Findings show that all cells irradiated with doses ranging from 100 to 315 kr can form one or several buds before inactivation. Survivability or, to be more exact, the number of regenerable cells depends on duration of the incubation period. During the first hours of incubation the regenerable cell level does not change in cells in which potential injuries have not been realized, and then this level rapidly decreases depending on the radiation dose. This decrease becomes marked when the number of budding cells reaches 20-30%. The level of regenerable cells decreases to a minimum value at the end of the eighth hour of incubation when almost all irradiated cells have formed buds. On the basis of mathematical analyses of the experimental data and on the basis of literature sources, the author draws the conclusion that the realization of potential injuries responsible for

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ACCESSION NR: AP4015090

the death of irradiated cells and the realization of potential injuries responsible for chromosome abnormalities take place in the same period of the life cycle and the mechanism is probably the same. Orig. art. has: 3 figures and 5 tables.

ASSOCIATION: Institut meditsinskoy radiologii AMN SSSR, Obninsk  
(Institute of Medical Radiology AMN SSSR)

SUBMITTED: 23Oct62

DATE ACQ: 12Mar64

ENCL: 00

SUB CODE: LS

NR REF SOV: 011

OTHER: 006

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ACCESSION NR: AP4027983

or, on the contrary, of lethally damaged cells. Experimental data demonstrate that lysis of Sacch. vini Megri-139-B yeast and Sacch. cerevisiae 16 x 32 yeast practically do not affect the shapes of regeneration curves with 8 to 9 day incubation after irradiation in sterile water at 30°C. Under these conditions lyses of the two cell strains are insignificant or completely absent. However, lyses of Sacch. cerevisiae, X-320 and X-362 yeast cells markedly affect the shapes of the regeneration curves, mostly the nonlethally damaged cells. The true cell regeneration process of these two strains is best reflected by curves based on the microcolony method. Regeneration curve plateaus for all investigated yeast strains are dependent on the existence of a true radiation damage irreversible component, and not on lysis participation. Orig. art. has: 9 formulas and 3 figures.

ASSOCIATION: Institut meditsinskoy radiologii AMN SSSR, Obninsk  
(Medical Radiology Institute AMN SSSR)

SUBMITTED: 01Nov63

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OTHER: 000

Card 2/2

KAPUL'TSEVICH, Yu.G.; KCHOGODIN, V.I.

Statistical models for postradiation cell restoration.  
Radiobiologia 4 no.3:349-356 '64.

(MIRA 17:11)

1. Institut meditsinskoy radiologii AMN SSSR, gorod Obninsk.

KOROGODIN, V.I.

Kinetic regularities of the postradiation restoration of  
cells. Med. rad. 10 no.8:17-24 Ag '65. (MIRA 18:9)

1. Otdel obshchey radiobiologii i radiatsionnoy genetiki (zav. -  
doktor biolog. nauk N.V.Timofeyev-Resovskiy) Instituta meditsin-  
skoy radiologii AMN SSSR.

ZEDGENIDZE, G.A.; GORIZONTOV, P.D.; MOSKALEV, Yu.I.; SVYATUKHIN, G.S.;  
KOROGODIN, V.I.; KOSTELYANTS, B.L.; STRELIN, G.S.

Brief news. Med. rad. 9 no.2:74-84 D '64.

(MIRA 18:12)

L 21942-66 ERT(1)/ERT(m)/T JK

ACC NR: AP6014655

SOURCE CODE: UR/0241/65/010/008/0017/0024

AUTHOR: Korogodin, V. I.

ORG: Department of General Radiobiology and Radiation Genetics /headed by Doctor of Biological Sciences N. V. Timofeyev-Resovskiy/, Institute of Medical Radiology.

AMN SSSR (Otdel obshchey radiobiologii i radiatsionnoy genetiki Instituta meditsinskoy radiologii AMN SSSR)

TITLE: Kinetic patterns of the postradiation recovery of cells

SOURCE: Meditsinskaya radiologiya, v. 10, no. 8, 1965, 17-24

TOPIC TAGS: gamma irradiation, alpha particle, enzymes, genetics, radiation biologic effect, radiation injury

ABSTRACT: The phenomenon of the postradiation recovery of cells may be investigated from two standpoints, by stressing either its kinetic patterns or its underlying biochemical processes. Any fruitful research into the biochemical nature of this recovery depends on the selection of units for quantitative consideration of the process, and this in turn requires formulating a working hypothesis and an adequate statistical model of the process. This is why the study of the kinetic patterns of postradiation recovery is essential. In this connection, the author presents the results of an investigation of the yeast *Sacch. vini* (Megri-139-V) grown on wort agar; a 2-3 day culture of such yeast contains 99.2-99.8% "quiescent" cells. Portions of an

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UDC: 616-018.1-001.28-036.82 (042)

L 21942-66

ACC NR: AP6014655

aqueous suspension of these cells were exposed to gamma-irradiation or the action of alpha-particles and thereupon disseminated on the culture medium and incubated at 30°C. After this the survival rate of the irradiated cell was investigated as a function of recovery time, i.e., of the interval between irradiation and placement in the culture medium. It is shown that the postradiation recovery of cells is never complete owing to the occurrence of irreversible elementary injuries. The elementary unit for a quantitative consideration of the process is the probability of recovery from a single elementary injury. An equation is derived to show that the higher the time  $t$  and the recovery constant  $\beta$  the lower the effectiveness of irradiation of cells with a given dose. Thus, in every individual radiobiological experiment the magnitude of the final effect (e.g., survivability) is a consequence of not only the initial injury to the cells on irradiation with a given dose, but also of the subsequent recovery. It is now virtually established that the lethal consequences of radiation too are associated with damage to the genetic apparatus of the cells. It is also known that, qualitatively, the genetic effects of radiation do not differ from spontaneous gene and chromosome mutations. The possibility is noted that in experiments with post-radiation recovery the activity of the biological systems which in non-irradiated cells are designed to eliminate premutagenic changes are being revealed. If further research answers this question affirmatively, this would mean that the research into the postradiation recovery of cells has made it possible to establish a new law of general biology; the existence,

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1. 21942-66

ACC NR: AP6014655

in the cells, of biochemical systems that participate in the regulation or stabilization of the rate of "spontaneous" mutation process. Such an "anti-mutagenic" function may be inherent in some group of enzymes. Orig. art. has: 5 figures. [JPRS]

SUB CODE: 06, 20 / SUBM DATE: 25Jan65 / ORIG REF: 014 / OTH REF: 011

Card

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ACC NR: AM6029768

of radiobiological investigation. There are 737 references of which 278 are Soviet.

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Card 2/3

ACC NR: AM6029768  
APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000824810008-0

Literature -- 368

Epilogue -- 385

SUB CODE: 06/

SUBM DATE: 31Mar66/

ORIG REF: 500/ OTH REF: 337/

Card 3/3

GLADKIKH, V.F.; KELLINA, O.I.; KOROGODINA, Yu.V.

Data on the tolerance of laboratory animals for the antimalarial  
cycloquin. Med.paras. i paras.bol. 28 no.4:443-448 J1-Ag '59.  
(MIRA 12:12)

1. Iz Instituta malyarii, meditsinskoy parazitologii i gel'mintologii  
Ministerstva zdoravookhraneniya SSSR (dir. instituta -prof. P.G. Ser-  
giyev).

(ANTIMALARIALS pharmacology)

**KELLINA, O.I.; KOROGODINA, Yu.V.**

Tolerance for cycloquin combined with chloridine in experimental conditions. Med.paraz. i paraz.bol. 28 no.4:448-454 J1-Ag '59.

(MIRA 12:12)

1. Iz otdeleniya farmakologii i khimioterapii Instituta malyarii, meditsinskoy parazitologii i gel'mintologii Ministerstva zdavookh-raneniya SSSR (dir. instituta - prof. P.F. Sergiyev, zav. otdeleniyem - prof. Sh.D. Moshkovskiy).

(ANTIMALARIALS pharmacology)

GLADKIKH, V.F.; KOROGODINA, Yu.V.

Toxicological and certain pharmacodynamic properties of quinocide.  
Med.paraz.i paraz.bol. 29 no.4:440-447 J1-Ag '60. (MIRA 13:11)

1. Iz gel'mintologicheskogo otdela (zav. - prof. V.P. Pod'yapol'skaya) Instituta meditsinskoy parazitologii i tropicheskoy meditsiny imeni Ye.I. Martynovskogo (dir. - prof. P.G. Sergiyev) Ministerstva zdravookhraneniya SSSR.  
(QUINOLINE)

KOROGODINA, Yu.V.; SELAVRI, T.V.

On dithasanine toxicology. Med.paraz.i paraz.bol. 29 no.6:650-  
654 '60. (MIRA 14:2)

1. Iz otdela gel'mintologii Instituta meditsinskoy parazitologii  
i tropicheskoy meditsiny imeni Ye.I. Martynovskogo Ministerstva  
zdoravookhraneniya SSSR (dir. instituta - prof. P.G. Sergiyev,  
zav. otdelom - prof. V.P. Pod'yapol'skaya).  
(ANTHELMINTICS) (CARBOCYANINE IODIDE)

ALMAZOYEVA, V. V.; BATAYEV, P. S.; STAVROVSKAYA, V. I.; AKSEYENKO, G. R.;  
BEZZUBOVA, V. P.; VOROB'YEVA, Z. G.; GLADKIKH, V. F.; ZHUKOVA, L. I.;  
ZUYEVA, N. K.; KOROGODINA, Yu. V.; KLIMOVA, L. P.; KRYLOV, A. S.;  
MASLOV, A. V.; PEYKRE, A. E.; SADOVSKAYA, G. Yu.; SPERANSKAYA, V. N.;  
SOLOVEY, V. Ya.; TURCHINS, M. Ye.; SHAMRAY, A. F.; SHIP'TSINA, N. K.;  
SHINKEVICH, M. A.

Field trials of new repellents. Med. paraz. i paraz. bol. no.4:  
457-464 '61. (MIRA 14:12)

1. Iz entomologicheskogo otdela i otdela sinteticheskikh preparatov  
Instituta meditsinskoy parazitologii i tropicheskoy meditsiny imeni  
Ye. I. Martsinovskogo Ministerstva zdravookhraneniya SSSR (dir. -  
instituta - prof. P. G. Sergiyev, zav. otdelami - prof. V. N.  
Beklemishev i prof. V. I. Stavrovskaya)

(INSECT BAITS AND REPELLENTS)

KOROGODINA, Yu.V.

Characteristics of the damage of chick blastoderm cells after  
irradiation in ovo. Radiobiologiya 5 no.3:402-408 '65. (MIRA 18:7)

1. Institut meditsinskoy radiologii AMN SSSR, Obninsk.

KOROGODINA, Yu.V.

Some results of the observations on the development of irradiated chick blastoderm. Radiobiologiya 5 no.4:559-561 '65.  
(MIRA 18:9)

1. Institut meditsinskoy radiologii AMN SSSR, Obninsk.

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32 (3)

SOV/112-57-5-10942

Translation from: Referativnyy zhurnal. Elektrotehnika, 1957, Nr 5, p 197 (USSR)

AUTHOR: Korogodskaya, R. L., Madison, V. P.

TITLE: Selector Testers for Decade-Step Railroad Automatic Telephone Central Offices (Pribory dlya ispytaniya iskateley ZhATS dekadno-shagovoy sistemy)

PERIODICAL: Sb. Leningr. in-ta inzh. zh.-d. transpr., 1956, Nr 151, pp 164-169

ABSTRACT: The Chair of Electric Communications, Leningradskiy institut inzhenerov zheleznodorozhnogo transporta (Leningrad Institute of Railroad Transportation Engineers), in collaboration with the workers of Leningrad Railroad Junction, have developed and built special instruments for service tests of selectors. Connection diagrams of three instruments are presented; two of the instruments are intended for testing repeater-type selectors (type A central offices) and also for testing trunk connectors. The instruments have buzzers for checking the contacts of the call circuit as well as two dials for checking vertical wiper motion with various speeds of dial rotation. Each dial

VOLKOV, Vladimir Mikhaylovich, DYUFUR, Sergey L'vovich, KOROGODSKAYA, Raisa  
L'vovna, NOVIKOV, Vasil'y Aleksandrovich, red.; FEL'DMAN, A.B., inzh.,  
red.; BOBROVA, Ye.N., tekhn. red.

[Telephony] Telefoniz. Pod obshchey red. V.A. Novikova. Moskva, Gos.  
transp. shel-dor. izd-vo, 1958. 404 p. (MIRA 11:10)  
(Telephone)

1. MIRONOV, V. S.; KOROGODSKIY, B. D.
2. USSR 600
4. School Gardens
7. Work practice in the school garden, Est. v shkole, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

KOROGODSKIY, B.D.

School of progressive pedagogic experience. Khim. v shkole 17  
no.3:52-55 My-Je '62. (MIRA 15:6)

1. Nachal'nik dorozhnogo pedagogicheskogo kabineta Severo-Kavkazskoy  
zheleznoy dorogi. (Teachers, Training of)  
(Chemistry—Study and teaching)

L 39494-65 ENG(j)/ENG(r)/ENT(1)/FS(v)-3/ENG(v)/ENG(a)-2/ENG(c) Pa-5 DD  
 ACCESSION NR: AP5007790 S/0177/64/000/006/0053/0054

AUTHOR: Korogodskiy, G. M. (Lieutenant colonel of medical service); Kapustnik, A. Ya.  
 (Lieutenant colonel of medical service)

TITLE: A case of severe decompression sickness

SOURCE: Voenno-meditsinskiy zhurnal, no. 6, 1964, 53-54

TOPIC TAGS: decompression sickness, aviation medicine, therapy, blood, central nervous system

ABSTRACT: A description is presented of acute, severe decompression disorders in a navigator who stayed in a depressurized cabin for 30 minutes at an altitude of 11,000 m. Coma, deviation of vision to the left, cerebellar asynergy, and decreased pain and temperature sensitivity with retention of tactile sensitivity on the right side of the face suggested right trunk localization of the process. The cardiovascular disorders--hemoconcentration, solitary erythrocytes, proteinemia, urinary hyperglycemia,-- were apparently the result of impaired systemic regulation by the central nervous system. Initial therapeutic measures included the administration of oxygen and medication aimed at controlling collapse: intravenous injection of 1 ml of 0.06% corglycon (Convallaria majalis glycoside) in 10 ml of 40% glucose solution, 1% mesaton (meta-oxyphenyl, methylaminoethanol hydrochloride--  
 Card 1/2

L 39494265

ACCESSION NR: AP5007790

a sympathomimetic) solution intramuscularly, and 200 ml of polyglukin intravenously. After the acute phase, treatment consisted of intravenous injection of 10 ml of 1% atropine solution in 10 ml of 40% glucose solution and intramuscular injection of 10 ml of 25% magnesium sulfate solution and bromides. The patient eventually recovered.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: PH, L9

NO REF SOV: 000

OTHER: 000

Card 2/2 *hs*

KOROGODSKIY, M.

Measures for increasing the durability of tires. Avt.transp. 37  
no.1:51 Ja '59. (MIRA 12:2)

1. Zamestitel' nachal'nika tekhnicheskogo upravleniya Ministerstva  
avtomobil'nogo transporta i shosseynykh dorog USSR.  
(Automobiles--Tires)

KOROGODSKIY, M.

Consumption norms for oil and fuel in repairing. Avt.transp. 42  
no.12:16-17 D '64. (MIRA 18:4)

KOROGODSKIY, M.

New technical specifications. Avt.transp. 41 no.4:54 Ap '63.  
(MIRA 16:5)

1. Zamestitel' nachal'nika tekhnicheskogo upravleniya  
Ministerstva avtomobil'nogo transporta i shosseynykh dorog  
UkrSSR.

(Transportation, Automotive--Specifications)

KOROGODSKIY, M.

Temporary norms for fuel consumption for fuel-gas automobiles.  
Avt.transp. 41 no.10:22-23 0 '63. (MIRA 16:10)

KOROGODSKIY, M.V.; SHEYNIN, A.M., redaktor; MULIKOVA, I.F., tekhnicheskii  
redaktor

[Work practice with automobile trains; work practice of driver V.P. Bondarchuk of the auto brigade of the All-Union transportation Maintenance Association] Opyt raboty na avtopoezde; iz opyta raboty shofera Kirovogradskoi avtoroty Soluzsagottransa V.P. Bondarchuka. Moskva, Nauchno-tekhn. izd-vo avto-transportnoi lit-ry. 1955. (MLRA 9:2)  
30 p.

(Automobile trains)

ZELENCHUK, Yevgeniy Vasil'yevich; KISHCHINSKIY, Sergey Semenovich; ~~KOROGOD-~~  
SKIY, Miron Vladimirovich; VASIL'YEV, N.S., redaktor; KOGAN, P.L.,  
tekhnicheskiiy redaktor

[Operations of truck columns far from regular bases; experience of  
leading automotive units of the Ministry of Automotive Transport and  
Highways of the Ukrainian S.S.R.] Rabota avtomobil'nykh kolonn v  
otryve ot postoiannykh baz; iz opyta peredovykh avtokhoziaistv  
Ministerstva avtomobil'nogo transporta i shosseinykh dorog USSR.  
Izd. 2-oe, perer. i dop. Moskva, Nauchno-tekhn. izd-vo avtotransp.  
lit-ry, 1956. 83 p. (MIRA 9:10)  
(Transportation, Automotive)

ZELENCHUK, Ye.V.; ZEL'DES, L.M.; KOROBOVSKIY, M.V.; HUDNITSKIY, A.,  
redaktor; VUYEK, M., tekhnicheskiy redaktor.

[Prolonging the life of storage batteries] Uvelichenie sroka  
slushby akkumulyatornykh batarei. Kiev, Gos. izd-vo tekhn. lit-ry  
USSR, 1953. 78 p. [Microfilm] (MLRA 8:2)  
(Storage batteries)

1. KOROGODSKIY, M., Eng.
2. USSR (600)
4. Oxyacetylene Welding and Cutting
7. Gas welding of thin-walled cast iron parts for automobiles and tractors.  
MTS 13, No. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

VAL'CHUK, G.I., inzhener; KOROGODSKIY, M.V., inzhener

Experiment in restoring thin-walled cast iron machine parts.  
Svar. proizv. no. 2:26-27 F '55. (MLRA 8:9)  
(Cast iron--Welding)

KOROGODSKIY, M. V., A. S. KRAYUSHKIN, F. A. FEDOTOV, M. L. BARABASH

Using Metal-Colloidal Lubricants (Organosol of Iron) for the Running-In of Automobile-Motor Parts

Povsheniye iznosostoykosti i sroka sluzhby mashin. t. 2 (Increasing the Wear Resistance and Extending the Service Life of Machines. v. 2) Dnyev, Izd-vo AN UkrSSR, 1960. 290 p. 3,000 copies printed. (Series: Its: Trudy, t.2)

Sponsoring Agency: Vsesoyuznoye nauchno-tekhnicheskoye obshchestvo mashinostroitel'noy promyshlennosti. Tsentral'noye i Kiyevskoye oblastnoye pravleniya. Institut mekhaniki AN UkrSSR.

Editorial Board: Resp. Ed.: B. D. Grozin; Deputy Resp. Ed.: D. A. Draygor; M. P. Braun, I. D. Faynerman, I. V. Kragel'skiy; Scientific Secretary: M. L. Barabash; Ed. of v. 2: Ya. A. Samokhvalov; Tech. Ed.: N. P. Rakhlina.

COVERAGE: The collection contains papers presented at the Third Scientific Technical Conference held in Kiyev in September 1957 on problems of increasing the wear resistance and extending the service life of machines. The conference was sponsored by the Institut stroitel'noy mekhaniki AN UkrSSR (Institute of Structural Mechanics of the Academy of Sciences Ukrainian SSR), and by the Kiyevskaya oblastnaya organizatsiya nauchno-tekhnikeskogo obshchestva mashinostroitel'noy promyshlennosti (Kiyev Regional Organization of the Scientific Technical Society of the Machine-Building Industry).

KOROHODSKIY, M.V.

S/021/61/000/002/010/013  
D210/D303

AUTHOR: Korohods'kyi, M.V.

TITLE: Running in of certain metals in the presence of organic iron sols

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Dopovidi, no. 2, 1961, 188 - 191

TEXT: The author gives the results of his investigations into the effect of organic iron sols, added to a standard lubricant, on the running in of a steel-bronze friction-couple. The experiments were carried out in the Department of Metallurgy and Contact Strength of the Institute of Mechanics of Academy of Sciences UkrSSR, on a friction installation MI, to which some special devices were added [Abstractor's note: Description of equipment not given]. The tests were made with a standard lubricant "2" GOST 1707-51 (subsequently called "A") and with a mixture of this oil with 2.5 % of organic iron sols, prepared in the Institute of General and Anorganic Che-

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Running in of certain metals ...

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D210/D303

mistry of the Academy of Sciences UkrSSR. [Abstractor's note: Composition of iron sols not given]. The mixture of oil and iron sols is subsequently called "B". The steel used for tests was a tempered standard steel 45; the pressure on the friction-couple was fixed before the tests, the lubricant added by drops on the rotating sample; pressures used were: 25, 75 and 100 kg/cm<sup>2</sup>, with a constant friction rate of 0.47 m/sec and a fixed amount of lubricant added to the friction area. At 25 kg/cm<sup>2</sup> pressure and a drop of "A" added every 30 sec, the running in proceeded quite smoothly and a 0.25 friction coefficient was attained and stabilized after 50,000 rotation cycles; with a drop of "A" added every 60 sec, this coefficient reached a similar value only after 160,000 cycles. When the pressure was raised to 100 kg/cm<sup>2</sup> with one drop of "A" every 60 sec, particles of bronze began to stick to the steel roller, covering its whole surface; the temperature of the bronze part of the friction-couple rising to such an extent that a falling oil drop was evaporated in 20-30 sec, and dry friction was observed, the color of the steel roller changing to a very dark one. The ✓

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D210/D303

Running in of certain metals ...

adding of lubricant at 30 sec. intervals did not affect the process essentially and only an uninterrupted supply of oil prevented, to some extent, the rollers' excessive heating; but even in that case the amount of friction was six times larger than where a drop of "B" was added under the same pressure at 60 sec. intervals. Therefore, the tests with "A" under 100 kg/cm<sup>2</sup> pressure were stopped, the pressure lowered to 75 kg/cm<sup>2</sup> and the lubricant added at first every 60 sec., then every 30 sec., but the results were the same. Friction stabilization was not reached even after 215,000 cycles, the samples being excessively heated and badly worn out. Only when the samples were subjected to previous friction under 45 kg/cm<sup>2</sup> pressure for 15 min. ("A" added at 30 sec. intervals), the friction coefficient was stabilized during the normal test after 50,000 cycles; but even then the coefficient was 3 times higher than in the case of "B" added every 60 sec. under 100 kg/cm<sup>2</sup> pressure. To verify these results another series of experiments was carried out with lubricant "B" under 100/cm<sup>2</sup> pressure, oil added every 60 sec. The transfer of bronze particles was markedly reduced.

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S/021/61/000/002/010/013  
D210/D303

Running in of certain metals ...

ced, the friction coefficient during the first 30 min. (8,000 cycles) was never higher than 0.340, falling after 13,000 cycles to 0.25; which was much faster than with "A" and 25 kg/cm<sup>2</sup> and oil added at 30 sec. intervals. The stabilization of the friction coefficient with "B" was observed also after 50,000 cycles, but it was twice as low as that with "A" at 25 kg/cm<sup>2</sup> pressure (oil every 30 sec). For testing the lasting after-effects of "B", during the first two hours, friction was carried out with "B" under 100 kg/cm<sup>2</sup> pressure, and was oil added every 60 sec; then the test proceeded in the same way with "A". The result was very similar to that obtained with "B" under the same conditions and was more favorable than with "A" at 25 kg/cm<sup>2</sup> pressure, oil being added every 30 sec. There are 1 figure and 4 Soviet-bloc references.

ASSOCIATION: Institut mekhaniky AN URSR (Institute of Mechanics, AS UkrSSR)

PRESENTED: by Member of Academy of Sciences UkrSSR, F. P. Byelyankin

SUBMITTED: April 27, 1960

Card 4/4

KOROGODSKIY, M.V.

Using the MI-type machine for studying the running-in of friction  
pairs. Zav.lab. 27 no.11:1417-1420 '61. (MIRA 14:10)

1. Institut mekhaniki AN USSR.  
(Testing machines)

(Friction)

S/081/62/000/017/094/102  
B177/B186

AUTHORS: Barabash, M. L., Korogodskiy M. V., Krayushkin, A. S.  
TITLE: Metal-polymer films on the friction surfaces of components  
PERIODICAL: Referativnyy zhurnal. Khimiya, no. 17, 1962, 545, abstract  
17P88 (In collection: Plastmassy v mashinostr. i priborostr.,  
Kiyev, Gostekhnizdat USSR, 1961, 359 - 366)

TEXT: For use in repairing components which have become worn by friction, a method is proposed for obtaining metal-polymer films based on glyptal varnish or epoxy resin ЭА-6 (ED-6) and a filler (dispersed phase of organosols of Fe). Methods of depositing the films on glyptal varnish or on the epoxy resin ED-6 are described. It is observed that components suffering from friction wear, including the most essential components (pistons, motor-car engine parts etc.), can be so treated. [Abstracter's note: Complete translation.]

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43776

S/653/61/000/000/033/051  
I042/I242

11.9800

AUTHORS: Barabash, M.L., Korogodskiy, M.V., and Krayushkin, A.S.

TITLE: Metal polymer films on the frictional surfaces of components

SOURCE: Plastmassy v mashinostroyenii i priborostroyenii. Pervaya resp. nauch.-tekhn. konfer. po vopr. prim. plastmass v mashinostr. i priborostr., Kiev, 1959. Kiev, Gostekhizdat, 1961, 359-366

TEXT: The addition of 0.1  $\mu$  iron particles improves the effectiveness of lubricants. A large number of these particles reorients the oil molecules in such a manner as to create a resilient boundary layer. The particles, in addition, tend to fill in and smooth out the surface microroughness. Still, the non-uniform distribution of lubricant creates points of friction which affect the

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S/653/61/000/000/033/051  
I042/I242

Metal polymer films on the....

performance of the entire machine. A new method of lubrication by coating surfaces with a film which has high adhesion to metal and a low coefficient of friction has been proposed. Such films consist of glyphthalic lacquer or 3A-6 (ED-6) epoxide resin with dibutyl phthalate plasticizer and polyethylene polyamine hardener, and contain 2.5% finely dispersed iron particles. Before application of the film, the surface must be thoroughly degreased and, in case of the epoxide resin, rubbed with activated graphite. The epoxide film gave better results in laboratory tests. Field tests on piston surfaces in automobile engines showed that the film coat cuts down by a factor of 3 the amount of gases escaping into the crankcase. After 50 000 km the film was used up but no wear was detected on the piston or cylinder surfaces. There are 4 figures.

Card 2/2

ARNAUTOV, V.T.; BARANOV, V.M.; DONSKOY, S.A.; PASTUKHOV, A.I.; SMIRNOV, L.A.;  
TORSHILOV, Yu.V.; TRET'YAKOV, M.A.; UDOVENKO, V.G.; FREYDENZON, Ye.Z.;  
SHCHEKAIEV, Yu.S.; Primalni uchastiye: MAKAYEV, S.V.; KOMPANIYETS,  
G.M.; NAGOVITSYN, D.F.; NOVOLODSKIY, P.I.; VARSHAVSKIY, V.L.;  
KOROGODSKIY, V.G.; KLIBANOV, Ye.L.; MEDVEDEVSKIKH, Yu.; TALANTSEVA,  
T.I.; DUBROV, N.F.; DZEMYAN, S.K.; TOPYCHKANOV, B.I.; CHARUSHNIKOV,  
O.A.; KHARITONOV, Yu.A.

Developing and mastering the technology of converting vanadium  
cast iron in oxygen-blown converters with a 100 ton (Mg) capacity.  
Stal' 25 no.6:50%-508 Je '65. (MIRA 18:6)

1. Nizhne-Tagi'skiy metallurgicheskiy kombinat (for Makayev, Koma-  
niyets, Nagovitsyn, Novolodskiy, Varshavskiy, Korogodskiy, Klibanov,  
Medvedevskikh, Talantseva). 2. Ural'skiy nauchno-issledovatel'skiy  
institut chenykh metallov (for Dubrov, Dzemyan, Topychkanov, Charush-  
nikov, Kharitonov).

KOROGODSKIY, Yu.

42569. Opyt Povysheniya Kvalifikatsii Vozdushnykh Rabotnikov Avtokhozyaystv (Leningr. Avtotrest M-va Avtotransporta RSFSR.) Avtomobil', 1948, No. 11, S. 23-24.

KOROGOGYIN, V., a biologiai tudományok kandidátusa

Remedial treatment of cells. Elovilag 5 no.1:18-23 Ja-Mr '60.

KOROGYI, Imrene

The Yakut Autonomous Soviet Socialist Republic, the new industrial district in the Soviet Union. Foldr kozl 7 no.4: 391 '59.

KOROHODA, Jerzy; ANGELUS, Wojciech

Effect of gibberellic acid upon the concentration of chlorophyll  
in pea leaves. Nauki matematyczne przyrod Torun no.6:113-116 '60.

1. Zakład Hodowli Roslin, Wyższa Szkoła Rolnicza, Lublin, i  
Stacja Hodowli Roslin Bronowice k. Krakowa.

KOROHODA, Jerzy; MILCZAK, Marian

Mulching potatoes with highmoor and ammonia treated peat. Rocz  
nauk roln rosl 86 no.3:503-~~525~~ '62.

1. Katedra Hodowli Roslin i Nasiennictwa, Wyzsza Szkola Rolnicza,  
Lublin.

KOROHODA, Jerzy

Experiment in applying gibberellic acid in horticulture and agriculture. Nauki matematyczne przyrod Torun no.6:117-125 '60.

1. Zaklad Hodowli Roslin, Wyzsza Szkola Rolnicza, Lublin.

KOROHODA, Jerzy

Twenty years of vegetable growing in People's Poland. Postepy nauk  
roln 11 no.5:3-23 S-0 '64.

KOROHODA, Jerzy

Decreased sugar level of the cerebrospinal fluid in patients with cysticercosis of the nervous system. Pol. tyg. lek. 19 no.13:473-475 23 Mr '64.

1. Z Kliniki Neurologicznej Akademii Medycznej w Krakowie (kierownik: prof. dr. Wladyslaw Jakimowicz).

MUSIAL, Leopold; KOROHODA, Maria Jolanta

New hydantoin derivatives substituted in positions 3 and 5.  
Pt. 4. Roczniki chemii 36 no.11:1607-1614 '62.

1. Katedra Chemii, Wyższa Szkoła Pedagogiczna, Krakow.

KOROHODA, Wlodzimierz

Plasmatic membranes in the cell. Wiadom botan 7 no.2:127-144 '63.

KOROHODA, W.; LUKIEWICZ, S.

Electrophoretic studies on plant cells, Pt. 1. Folia biol 11  
no.1:11-17 '63.

1. Department of Plant Physiology, Polish Academy of Sciences;  
Head: F. Gorski, Ph.D. and Department of Experimental Zoology,  
Polish Academy of Sciences, Krakow.; Head: S.Skowron, Ph.D.

*Ac 1106/1 0.5.*

PALLADIN, O.V., red.; SEMENENKO, M.P., akademik, red.; SHCHERBAN', O.N., akademik, red.; GNEDENKO, B.V. [Haidenko, B.V.], akademik, red.; DELIMARSKIY, Yu.K. [Delimars'kyi, IU.K.], akademik, red.; KAVETSKIY, R.Ye. [Kavets'kyi, R.IE.], akademik, red.; KHRENOV, K.K. [Khrienov, K.K.], akademik, red.; KOROID, O.S., kand.ekon.nauk, red.; GUDZENKO, P.P. [Hudzenko, P.P.], ~~kand.ist.nauk~~, red.; SHIKAN, V.L., red. / izd-va; RAKHLINA, N.P., tekhn.red.

[Development of science in the Ukraine during the past 40 years]  
Rozvytok nauky v Ukraini'kii RSR za 40 rokiv. Kyiv, 1957. 529 p.  
(MIRA 11:3)

1. Akademiya nauk URSR, Kiyev. (for Semenenko, Shcherban', Gnedenko, Delimarskiy, Kavetskiy, Khrenov)  
(Ukraine--Science)

YOFFE, Yevgeniy Mikhaylovich [Ioffe, I.E.M.]; KOROID, O.S., red.

[Problems of socialist reproduction] Deiski pytannia sotsialistychnoho  
vidtvorennia. Kyiv, 1958. 39 p. (Tovarystvo dlia poshyrennia poli-  
tychnykh i naukovykh snan' Ukrain's'koi RSR. Ser.2, no.5) (MIRA 12:3)  
(Russia--Economic conditions)

KOROID, O.S.; BALKOVII, P.M. [Balkovyi, P.M.]

Literature dedicated to the 40th anniversary of the Great October.  
Visnyk AN URSR 29 no.1:72-77 Ja '58. (MIRA 11:4)  
(Ukraine--History)

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USSR/Plant Physiology. Mineral Nutrition

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Abs Jour : Ref Zhur - Biol., No 7, 1958, No 29411

Author : Korokhov L.M.

Inst : Kishinev Agricultural Institute

Title : Mineral Nutrition as a Factor in the Productivity Increase  
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Orig Pub : Tr. Kishinevsk. s. -kh. in-ta, 1957, 13, 231

Abstract : Field and vegetation experiments were carried out in  
1946-1955 to study the effect of the conditions of root  
nutrition on the productivity of photosynthesis of  
various agricultural plants (grains, soya, beans, radish,  
sunflower and others). The positive action of optimum  
doses of N,P,K on the intensity and the productivity of  
photosynthesis and related physiological processes was  
noted. The shortage and surplus of basic nutrition ele-  
ments shortened the period of productive photosynthesis,

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ACCESSION NR: AP5015528 UR/0286/65/000/008/0066/0066

AUTHORS: Ovchinnikov, V. N.; Korokin, P. A.; Yakutin, I. N. 40 B

TITLE: Method for inputting information into a computer. Class 42, No. 170209

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 8, 1965, 66

TOPIC TAGS: computer input device, information processing 16C

ABSTRACT: This Author Certificate presents a method for inputting information into a computer with the information represented in the form, for example, of a uniform telegraph code by commutation of the communication channels at the input of the computer. To input information with its transfer rate along the communication channels without intermediate storage of information in each channel, commutation of all the communication channels is produced during a time not exceeding the transfer time of one telegraph sign along a channel operating with maximal transfer rate. Interrogation of each channel is carried out in equal intervals of time less than the commutation period of one channel. The accepted information is recorded in an operational register with operational bands, the number of which corresponds to the number of service channels.  
ASSOCIATION: none

Card 1/2

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